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### The past as a foreign country

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The Past as a Foreign Country:  
Bioarchaeological Perspectives on Pinker's "Prehistoric Anarchy"

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Abstract: Steven Pinker's thesis on the decline of violence since prehistory has resulted in many popular and scholarly debates on the topic that have ranged – at times even raged – across the disciplinary spectrum of evolution, psychology, philosophy, biology, history and beyond. Those disciplines that made the most substantial contribution to the empirical data underpinning Pinker's notion of a more violent prehistoric past, namely archaeology and bioarchaeology/physical anthropology, have not featured as prominently in these discussions as may be expected. This article will focus on some of the issues resulting from Pinker's oversimplified cross-disciplinary use of bioarchaeological datasets in support of his linear model of the past, a model that, incidentally, has yet to be incorporated into current accounts of violent practices in prehistory.

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## **Introduction**

Steven Pinker's *The Better Angels of our Nature* is not the first publication to have put bioarchaeological evidence for high levels of violence in prehistory into the spotlight.<sup>1</sup> Like Pinker, Lawrence Keeley's *War Before Civilization* gave prominence to both skeletal and ethnographic studies when re-creating the prehistoric narrative on violence, rejecting the image of a pacified past.<sup>2</sup> Pinker has, in fact, simply re-used many of the studies featuring in Keeley's work. This has come under considerable criticism on the basis of its statistical inferences, which use percentage deaths in war of up to 60 percent in some archaeological as well as ethnographic studies, and is more eloquently and knowledgeably discussed by Cirillo and Taleb and by Falk and Hildebolt.<sup>3</sup> Most recently, Oka *et al.* have demonstrated that Keeley's and Pinker's approach of simply considering the number of those engaged in violent conflict and the proportion of those killed by violent acts may not be a sufficiently robust indicator for comparisons across time. Instead they postulate that units with larger population sizes (often states) produce more casualties "per combatant than in ethnographically observed small-scale societies or in historical states" – in short this means that modern states are not any less violent than their archaeological predecessors.<sup>4</sup> While numbers are at the heart of much of the criticism levelled at Pinker, it is terminology which will be considered first here, followed by a critical exploration of bioarchaeological data generation, analysis and interpretation, which provides the foundation on which much of Pinker's argument for prehistoric violence rests.

## **Talking about the Violent Past**

Both archaeology and bioarchaeology (that is, the scientific analysis of human skeletal remains) are, as disciplines, reliant on clear, unequivocal terminology when trying to identify, classify, analyse and interpret what is in many cases a fragmented, incomplete record to re-

create past human activity. This terminology may not be universal and can include, for example, particular regional chronologies and systems of periodization, underpinned by more widely accepted conventions, ethical and professional frameworks and operational procedures (for example, The Vermillion Accord on Human Remains).<sup>5</sup> This is, of course, common to many disciplines, and a failure to fully understand, apply or cross-reference important key terms that emerge from other disciplines will ultimately obscure, confuse or weaken a potential argument, as will the assumption of universality of meaning.

### *Defining Prehistory*

The first term that needs to be considered critically is that of prehistory itself, which throughout Pinker's book is presented as a unifying expression mainly used to refer to non-state societies and the "anarchy of the hunting, gathering and horticultural societies in which our species spent most of its evolutionary history to the first agricultural civilizations with cities and governments, beginning around five thousand years ago".<sup>6</sup> In archaeological terms, prehistory encompasses a vast period of tens of thousands of years. Its traditional periodization highlights apparent changes in aspects of materials culture (Stone Age, Bronze Age, Iron Age), and is also punctuated by shifts in subsistence (such as the introduction of agriculture), settlement patterns (permanent rather than seasonal settlements), and societal organisation and administration (such as urbanisation).<sup>7</sup> The overall characterisation of prehistory immediately becomes much less defined and consistent when honing in on different regions at different times within Pinker's main chronological focus of hunter-gatherer/horticultural societies and beyond. The transition to agriculture, for example, certainly did not equal the universal emergence of cities and governments Pinker is implying.

The Danish cemetery site of Vedbæk, featured in Pinker's table documenting deaths in warfare in non-state and state societies, is a good case in point and highlights some of the

complexities behind each of 22 the sites listed by Pinker as representative of warfare deaths at prehistoric archaeological sites that, overall, make up a less than coherent sample.<sup>8</sup> At Vedbæk, two of the twenty-one burials (a small assemblage, which is not apparent when presented as percentage figures only) showed potential signs of violence. The cemetery dates to the 5<sup>th</sup> millennium B.C. and is attributed to the Mesolithic (that is, hunter-gatherer dominated) Ertebølle horizon (named after its type site in Jutland), representing complex hunter-gatherer-fisher groups whose settlement sites (some of which were probably occupied year-round), and cemeteries indicate social complexity and a relatively high degree of economic stability – something conventionally associated with the Neolithic and an agricultural subsistence economy.<sup>9</sup>

A single site from Denmark cannot be treated as representative of Pinker's assumed non-state prehistoric horizon in a Northern European context, and it is certainly highly problematic to compare or even group it with geographically and temporally removed sites from India, Africa and North America that join Vedbæk in Pinker's table, selected purely, one would guess, for their already collated and published English-language availability. Even much closer to Vedbæk, across the North Sea in Britain, a completely different picture for the Mesolithic emerges. No Mesolithic cemeteries have been excavated here to date, human remains are usually found disarticulated and in a variety of mostly non-funerary contexts and the complete skeletal record for the whole period consists of fewer skeletal remains than the single site of Vedbæk. Skeletal remains provide the most direct evidence for violence in prehistory, especially in times and places where specialised weapons may not exist or fortified architecture is absent.<sup>10</sup> Of course we can only analyse them where we find them, but it would be difficult to make a broad statement about cross-regional or continental trends of violent interaction in prehistory from the remains of 21 individuals found in a small cemetery.

## *Defining War*

While the subtitle of Pinker's book refers to the history of violence, it is the term warfare that features large in his narrative and is applied universally to a variety of contexts and datasets, ranging from violence-related skeletal trauma data in prehistoric grave sites to death statistics from World Wars. This raises the important question of the definition of the term and concept of war, what actually constitutes true evidence for its presence, and how this may vary depending on the context and period. This is an underdeveloped but important aspect in Pinker's argument.

Available definitions of war arise from anthropological, archaeological, historical and military studies and place different emphases on social, tactical and physical aspects, varying degrees of specificity and complexity and different scales of conflict. Physical force and domination are recurring features in existing characterisations of war, as are its link to groups or defined units.<sup>11</sup> Additional identifying features frequently examined are lethality, territoriality and duration.<sup>12</sup> At other times, war is defined exclusively as a state activity.<sup>13</sup> All of these attributes are valid and important considerations, but they are varied and not universally present in Pinker's data sample.

The scale of feuding and raiding, common expressions of conflict in pre-industrialised, pre-literate small scale societies like those of the earlier prehistoric periods Pinker is referring to may well be characterised by "organised fighting" involving planning, direction and an expected set of lasting results.<sup>14</sup> It may also see the application of the "use of organised force between independent groups" and therefore be defined as warfare according to some of the current anthropological definitions of war.<sup>15</sup> This does not mean it is always possible to distinguish its presence and results, at least archaeologically, from one-off violent events and other forms of interpersonal violence such as one-to-one fights, punishment, torture and domestic violence. The scale and intensity of a conflict may not necessarily be

accurately reflected in the archaeological record, and warfare as scaled, organised, long-term group conflict will need critical levels of human casualties or material destruction to be visible archaeologically and/or osteologically.<sup>16</sup>

In the face of such different ideas about underlying concepts as well as the actual practice of war, the main function of applying the term universally across time and space appears to be its superficial simplicity, its familiarity and its popular accessibility in a work that is situated across the popular/academic divide. Warfare also suggests a sense of scale that – when considering the discussions on Vedbæk and on the statistical validity of some of the data in Pinker’s work – may be misleading. It does also, even unintentionally, dramatise, perhaps even sensationalise the topic in a way that the term violence may not to the same degree.<sup>17</sup>

### *Tribes and Tribal People*

The term tribe or tribal people, as used by Pinker, is not without problems. Past criticisms have resulted from its potential colonial associations, involving assumed uniformity and linear concepts of societal development (that is, from the more “primitive” to the more “advanced/civilized”).<sup>18</sup> The key issue arises from the quasi-evolutionary classification it may suggest in a study that contrasts the concept of tribal with apparently more developed/advanced and therefore more peaceful state societies. This situation is further complicated by grouping recent ethnographic data with prehistoric archaeological data, which assumes or at the very least suggests uniformity or comparability between the two, blurring the lines between a projected or theorised past (the recent ethnographic record as a good approximation of the distant past), and the actual contemporaneous record of that past (the physical and bioarchaeological evidence).

If we use the term tribe simply as a descriptive term, what does it mean? It could, for example, suggest the presence of small or medium-sized, local pre-state groups, connected by language, culture and subsistence practices.<sup>19</sup> These groups may have been interacting, and lineages or families are likely to have provided their organisational basis. This has been confirmed for later, agricultural groups through DNA analysis, like at Eulau in Germany.<sup>20</sup> Nor can potential for some degree of social ranking, prestige or leadership be disregarded.<sup>21</sup> Again, we cannot really rely on this concept to be accurate for all the groups, past and present, summarised under non-state societies in Pinker's work. The term's value as a descriptive shorthand, even if properly defined, may be outweighed by the potential historically-derived connotations of inferior societal development, and the use of the term small-scale societies may be more appropriate in many cases.

### *Body Counts and Boneyards*

Every scholar, every scientist, every researcher publishing their work is under public scrutiny. Even highly technical, specialised or apparently inaccessible research results can find their way into the public sphere, and many, like *The Better Angels of our Nature*, are created for this very purpose: as semi-popular works accessible to specialists and non-specialists alike. In this case, the book's scope beyond the author's own discipline means that the choice of terminology and language used is pivotal, not just while trying to engage diverse audiences when presenting within the author's own specialism, but also while stepping outside it. While a certain degree of compromise and loss of detail may be unavoidable in "bigger picture" studies, this should not compromise sensitivity to wider issues within and outside the discipline.

Data resulting from the excavation, analysis and continued curation of human skeletal remains is a particularly complex and highly sensitive issue with laws, guidelines,



opinions and degrees of public approval, varying considerably regionally, nationally and globally.<sup>22</sup> Pinker's assertion that "several scholars have been scouring the anthropological and historical literature for every good body count from non-state societies that they could find", is a flippant description of the research process that would not be as readily applied if he were talking of more recent victims of conflict.<sup>23</sup> Do historians of the 20<sup>th</sup> century scour manuscripts and archival records for good body counts of the World War dead or do they carry out considered archival work that respects the sensitivity of the subject? There are also the statistics that are "harder to compute from boneyards".<sup>24</sup> Here Pinker is referring to the burial grounds, cemeteries and potential massacre sites that make up his archaeological sample, including a large number of Native American skeletal remains. One can hardly imagine this term being applied to Arlington cemetery or the war cemeteries of Flanders Fields, and its use by Pinker does suggest an intermittent lack of cultural sensitivity to deaths in the deep past, including deaths that, in this case, still matter to Native descendant groups today.

### **The Bioarchaeological Record**

Questions of methodology and ethically sound terminology discussed so far are also at the core of human skeletal analysis. The following section is going to highlight a number of caveats and limitations affecting the use of skeletal data that have an immediate bearing on the validity and suitability of Pinker's collated dataset. Some of these aspects, including high selectivity and lack of representativeness in the sample, have been touched upon in Ferguson's recent critiques of Pinker but deserve more detailed consideration.<sup>25</sup>

#### *The Missing Neolithic*

Bioarchaeologists of prehistory have long known about the potential for violence in the period, long before Keeley's coverage of the subject, not least through Wahl and König's 1987 publication of the Neolithic mass grave from Talheim, Germany. The skeletal remains from the site, dating to the later phase of the earliest Neolithic in the region (c. 5000 B.C.) document the violent killing of thirty-four individuals, including men, women and children that were consequently buried in a pit without apparent care or consideration.<sup>26</sup> Overall, the current skeletal data set for the Neolithic in Western and Northern Europe in particular, but also for other regions in Europe, does in fact present a more comprehensive, better understood and therefore more useful dataset than the Mesolithic assemblages Pinker has focused on. Chronologically, the Neolithic fills the period between Pinker's apparent hunter-gatherer "anarchy", and what he terms the "first agricultural civilizations with cities and governments". Following Pinker's argument this earliest phase of permanently settled agriculturalists should mark the beginnings of the decline of violent conflict. However, from bioarchaeological studies we know that in the few regions where both good Mesolithic and Neolithic skeletal are available, violence-related skeletal trauma frequencies do not appear to vary much at all and do not represent the peak Pinker is implying.<sup>27</sup> The omission of the Neolithic from Pinker's skeletal dataset, even though this period marks one of the most profound subsistence and cultural changes in human history, is puzzling and unsettling, especially in view of ready data availability. It may be explained through ignorance of this data source, which seems unlikely. The omission may have more to do with the problem of how to represent such the varied and extensive Neolithic dataset, which will be discussed in more detail below.

#### *Differential Diagnosis of Violence-Related Trauma and Collated Datasets*

Bioarchaeologists diagnose pathologies, including skeletal evidence for trauma, by looking at patterns of changes to the skeleton, discussing potential causes for the changes observed and making a decision on the most likely cause for the pattern observed with consideration of the wider context of the remains (such as the chronological and biological age and the archaeological context). In suspected cases where the implement of violence is still present, as in the case of embedded projectiles, this may be an obvious process. In all other cases the likelihood of an observed injury to be diagnosed as intentional rather than accidental is related to observations on injury location (for example, the head, while representing a small area of the whole body tends to be a prime target for violent assaults), as much as injury morphology (bone breaks a certain way depending on the type of impact, such as a blow with a blunt object). This analytical process takes into consideration clinical, forensic and experimental data as well as the skeleton's cultural context.<sup>28</sup> However, it may not always be possible to state with 100% certainty that an injury was violence-related; the more contextual and analytical detail is provided, the more secure the diagnosis.

Collated skeletal trauma data needs to be treated as a constrained resource when representing vastly different publication dates that reflect different research methods and often a diversity of research questions. Evidence of violence trauma may have been an incidental finding rather than the primary focus and may have been identified and diagnosed according to disparate criteria. Bioarchaeological analytical methods are constantly changing, and violent trauma analysis in particular has undergone a rapid progression over the last couple of decades.<sup>29</sup> Much of this comes back to the question of the coherence of the dataset and the criteria for its selection, which in Pinker's case reflects a clear focus on English language publications and their preselected ready availability. A growing body of recent work on violence-related trauma in the Neolithic has involved, in addition to new data on recently discovered sites, the re-analysis of existing assemblages according to current

analytical protocols.<sup>30</sup> This has resulted in a more robust and more readily useable and comparable dataset, one that keeps growing and one that has largely been ignored by Pinker.<sup>31</sup>

Another important consideration is the mixing of data from event-related sites – such as those resulting from one-off violent conflict or massacres like Crow Creek, a pre-European contact Native American site dating to A.D. 1325 which represents a large-scale violent event that may or may not be typical for the region and period – versus data from regular burial or cemetery sites such as the earlier example of Mesolithic Vedbæk that may be more indicative of the day-to-day level of violence within a society. These are discrete datasets on violent interaction that reflect rather different aspects of human behaviour and society – e.g. an large-scale massacre versus violent deaths within a community that may have resulted from a number of scenarios that could include, for example, one-to-one fighting, raiding and revenge killings. These different data may also produce quite different injury and fatality patterns that can be closely related to age or gender and include or exclude whole sections of society.<sup>32</sup> This brings the argument back to criticisms of Pinker's figures. The issue here is not just simply with numerical values but with the lack of information on what parts of society these figures actually represent.

## **Conclusion**

One could argue that many of the considerations and criticisms outlined above are addressing minor points of semantics that should not detract from the overarching thesis, but between the statistical and interdisciplinary shortcomings they do add up to a meaningful whole that should not be ignored. Despite affirmations to the contrary,<sup>33</sup> Pinker's account of prehistoric violence has neglected one of the most important aspects in this discussion, which is the significance of the experiential and contextual qualities of any violent event. Throughout the

book, Pinker refers to the impression of living in an age of violence versus the actual degree of violence present and experienced, but he fails to critically examine this question for his own work on prehistory. How did people experience life in the distant past that was their daily presence? We do not know whether the Mesolithic hunter-gatherer-fisher groups of Vedbæk viewed their lives as particularly violent, and with the still limited Mesolithic skeletal dataset available we cannot say for certain how representative Vedbæk is of the wider European Mesolithic. Most importantly, though, it is more complex and challenging than Pinker suggests to reconcile comparisons of diverse types and scale of violence occurring in chronologically and socio-culturally diverse contexts.

Archaeology's particularly close-up view of the past has always been inherently inter-disciplinary, including the sciences and the humanities. Anybody who is borrowing from, appropriating and ultimately 'colonising' related disciplines, or indeed the distant past, should avoid post-colonial attitudes. Like the attempt to understand the meaning and motivations behind past human actions, true interdisciplinarity can indeed be a foreign country when navigated without the support and guidance of those firmly rooted in the subjects we are trying to navigate.

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<sup>24</sup> Pinker, *Better Angels of our Nature*, 51.

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